

## Sustainable Land Imaging Architecture Study Team User Forum Panel Session

Purpose: Have a dialog with the user community to discuss user requirements and their relationship to the performance characteristics of operational land imaging systems and the effects that changes in these characteristics produce with regard to support for users' data applications

### Panel Session on the Operational Uses of Landsat Data

We will host a panel of 5 individuals that represent a breadth of application areas to facilitate dialog with the larger audience.

### Panel Members

Forestry – Randy Wynne (Virginia Tech)

Cryosphere – Dorothy Hall (NASA GSFC)

Agriculture – Rick Mueller (USDA NASS)

Drought/Water Resources – Martha Anderson (USDA ARS)

Land Cover – Curtis Woodcock (Boston U.)

We will open the session with a summary of prior work that has been conducted towards the compilation of user requirements and their traceability to system performance characteristics.

The Panel members would then be asked to comment on the importance of Landsat to their application areas, the relative importance of the various system performance characteristics for their particular applications, and what future system enhancements the program should consider. We would then open the discussion for input from the floor for other attendees to comment and ask questions.

The third segment of the session would involve presenting a series of questions to the audience and panel, which would include:

1. How would you prioritize enhancing the system performance characteristics (spectral coverage, spatial resolution, revisit time, swath width, etc.) to satisfy or advance your particular applications?
2. How important is instrument data calibration? To what extent could radiometric performance (signal-to-noise ratio, radiometric uncertainty) be relaxed?
3. How important is the simultaneity of spectral coverage in the VNIR-SWIR and TIR wavelength regions?
4. Do thermal data need to be collected in a sun synchronous orbit?
5. How important is the 10 am mean local crossing time?
6. What are your needs for data latency, e.g. turnaround time from sensor to product availability?
7. How important is global coverage and seasonal refresh?

8. Are there alternative data streams to those provided by the U.S. Government that should be pursued (e.g. international or commercial sources)?
9. Are there other sensor modalities that should be considered in the evolution of a sustainable land imaging program that could satisfy your applications requirements?
10. Are there different product types, access methods, and distribution services that the program should consider?

We will conclude the meeting by pointing to a web site location where attendees and other interested parties could access an applications requirements worksheet that could be completed and submitted after the workshop.